



October 3, 2022

RE: WSEC-Residential – Option 1 of R406 Table Preferred and Opposition to Heat Pump Mandate

Dear Washington State Building Code Councilors,

I am writing today on behalf of _____ to voice concerns over the Group 2 code package currently up for consideration. I urge the SBCC to remove proposals 032, 058, 059, 060, 062, 063, 065, 066, 079, 080, 089, and 091 from the Group 2 building code package. Further, I would urge adoption of Option 1 of the R406 Table (073) that preserves the ability to choose natural gas for space and water heating.

Washington is one of only three states in the nation operating under the 2018 IECC. 80% of the country is operating on the 2012 code or earlier. While the top ten greenhouse gas emitting states contribute half of the country's total emissions, Washington ranks among the lowest emitting states already.

In its current form, the 2021 code package represents the most stringent code in the nation and will increase the up-front cost of a new home by a minimum of \$24,070, meaning a homeowner will pay \$72,210 for these unfunded mandates over the life of their mortgage. Adding to the cost of constructing new housing units will exacerbate our housing affordability crisis. In Pierce County, 86% of families already cannot afford to purchase a median priced home.

Further, some of the proposed changes do not make financial sense for my clients. For example, (choose one of the examples #1-5 below and delete the remaining)

1. Heat pump systems are more expensive up-front and over the course of the product's life due to service calls. When looking at a high efficiency gas furnace and a high-efficiency tankless water heater compared to heat pump systems, we expect to see more than an \$8,300 increase in cost to the home buyer. Aside from cost, it's also much harder to place the outdoor compressor on small lots and townhome developments because of local setback requirements and decibel levels that can be heard at the property line (due to state and local noise ordinances).



2. Washington is a moderate climate state with the exception of Eastern Washington. Requiring a 0.28 U-factor rather than 0.30 U-factor (*proposal 079*) across the state instead of where it will make the most impact will increase window costs, as more triple pane windows will now be required to meet the new U-factor stringency.
3. The current required 5 ACH is cumbersome and expensive (approximately \$6,600 per home) to achieve. Lowering this requirement to 3 ACH (*proposal 089*) and removing credit for achieving 3 ACH will result in less of us builders utilizing this credit option.
4. The WUI code is extremely expensive. Proposals 058, 059, and 060 includes all provisions of the 2021 WUI code and will increase the cost of constructing new housing units by at least \$31,212, according to estimates from Home Innovation Labs. A homeowner that purchases a home built under the WUI can expect to pay a minimum of \$93,636 over the lifetime of their mortgage.
5. Proposals 032 and 080 dictate where we can place air handlers and water heaters. If passed, we will no longer be able to put these units in the garage or attic since these spaces do not meet the definition of a conditioned space and/or are not included in the definition of a building's thermal envelope. These two design standards will reduce usable square footage without making sizable gains in energy efficiency.

In addition to the updated building code, builders are fighting skyrocketing costs for building materials, supply chain challenges (such as with compliant heat pumps, reference emergency rule adopted by the SBCC in July of 2022: CR-103E), rising interest rates, and a shortage of qualified workers. At the same time, the HVAC industry specifically is facing changing refrigerant standards, moving from HFC refrigerants to A2L refrigerants. The change in refrigerant standards will reduce the supply of compliant heat pumps available to install in new homes.

I strongly urge the SBCC to remove proposals 032, 058, 059, 060, 062, 063, 065, 066, 079, 080, 089, and 091 from the Group 2 building code package before final passage. Washington builders and homeowners simply cannot afford these code updates.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ryan McGowan', with a stylized flourish at the end.

Ryan McGowan
Owner
RM Homes, LLC